

Please replace paragraph 4 starting on page 55 with the following:

Other methods than TAGMAN method for optically detecting progress of PCR may be employed. For example, there may be employed an AMPLISENSOR SYSTEM (produced by Funakoshi Co.) which utilizes fluorescence-related energy transfer, a method which utilizes intercalation of ethidium bromide or the like (see Japanese Unexamined Patent Publication No.184397/1993), a method which utilizes change in fluorescence polarization (see Japanese Unexamined Patent Publication No.23800/1995) or the like. As other means than optical detection methods, utilization of MALDI mass spectrometric analysis may be contemplated. It is possible that after completion of a reaction, one lid of a reaction vessel is removed, and necessary pre-treatment such as addition of a matrix reagent for MALDI is conducted to precisely measure molecular weights of a number of trace PCR products, thereby precisely detecting point mutation or repetition number of triplet repeat.

IN THE CLAIMS:

Please amend claim 34 as follows:

34. (Amended) A process for conducting a PCR reaction in a minute droplet of an aqueous solution protected from evaporation comprising the steps of:
 - providing a plate substrate;
 - providing an oily liquid layer;
 - providing an aqueous solution immiscible with said oily liquid layer;
 - shooting a minute droplet by inkjet of said aqueous solution into said oily liquid layer to contact said plate substrate;
 - providing a covering in contact with said oily liquid layer;
 - wherein said oily liquid layer surrounds all surfaces of said minute droplet of said aqueous solution that are not in contact with said plate substrate;
 - providing to said minute droplet a reactant; and conducting a PCR reaction in said minute droplet with said reactant whereby said PCR reaction is protected from evaporation.